

NATIONAL WEATHER SERVICE
PRODUCT DESCRIPTION DOCUMENT (PDD)
TYPE: Experimental Product
DATE: July 29, 2003

MESOSCALE WORK STATION ETA MODEL OUTPUT

Part 1 - Mission Connection

1. Product/Service Description:

The Mesoscale Work Station Eta Model is run locally at WFO Sacramento. Model output graphics, generated by GEMPAK software, are posted to the WFO Sacramento web page for standard pressure levels and the model surface. The fields include geopotential heights, vorticity, temperature, dew point, wind, relative humidity, vertical velocity, freezing level, precipitation type, sea level pressure, thickness, precipitation, clouds, precipitable water, convective available potential energy, and convective inhibition.

2. Product Type

Operational

3. Purpose/Intended Use:

The high resolution model is used for operational forecasting and research.

4. Audience:

The main audience are NWS offices and other government agencies located around the Northern California area. Other users include the local media, private climate and weather forecasting companies, local climate researchers, and local residents interested in high resolution weather forecast products.

5. Presentation Format:

The mesoscale model output is displayable via a web page. Static images in 3 hour forecast time steps are available through the forecast period of 36 or 48 hours.

6. Feedback Method:

Most feedback comes from internet users through an e-mail to Alex Tardy or the office webmaster. Feedback may also be provided by mail or phone to:

Alex Tardy
National Weather Service
3310 El Camino Ave - Room 228
Sacramento, CA 95821-6308
Phone 916-979-3051

E-mail comments or questions can be sent to: alexander.tardy@noaa.gov, or sto.webmaster@noaa.gov, or dave.toronto@noaa.gov.

7. Example/URL: <http://www.wrh.noaa.gov/sacramento/html/wseta.shtml>

Part 2 - Technical

1. **Format and Science Basis:**

WFO Sacramento runs and controls the local mesoscale model, called the workstation Eta. The model physics are the same as the operational Eta run at NCEP. This model has a resolution of 6 km. The model domain is centered over Northern California. The model has configurations that can be modified, such as the choice of 2 different convective schemes and model vertical coordinates. The model resolution and length of run time can also be modified. The technical limitations of this product are inherent in the parameterizations of the mesoscale model.

2. **Availability:**

The model is run four times a day out to 36 or 48 hours.

3. **Additional Information:**

Additional local Work Station Eta information is available at the following URL:

<http://www.wrh.noaa.gov/Sacramento/html/wsetadoc.html>